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Clean Air Voluntary Programs

A publication of the Pacific Southwest Region Air Division
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What is a Voluntary Program?

Protecting public health and the environment is the mission of the U.S. Environmental Protection Agency. When people consider the way EPA achieves this, they usually think about federal statutes, regulations, inspections or enforcement activities. That certainly is a major component of how EPA does its work (see our Winter 2002 "Clean Air Compliance Update"). But while regulation and enforcement are essential to our efforts, another important tool is the use of voluntary programs.

This issue focuses on some of the clean air voluntary programs of EPA, such as indoor air, radon and Energy Star. We also examine how regulated facilities can move beyond compliance and how organizations can be trained to work more effectively with communities. All of these voluntary program areas help us cooperate to achieve our environmental goals.

EPA Administrator Christie Whitman with fifth-grade class from San Francisco's Clarendon Elementary School. *Photo by David D. Schmidt.*

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INDOOR AIR QUALITY (IAQ)

EPA Administrator Christine Todd Whitman has declared asthma and the EPA ***Indoor Air Quality Tools for Schools Program*** as two of EPA's children's environmental health priorities for this year. These areas are the focus of many of EPA Region 9's Indoor Environments Team's (IET) efforts.

People are exposed to air contaminants indoors as well as outdoors; however, we spend 90% of our time indoors. Many contaminants, from solvents, to preservatives, to chemicals in personal care products and building materials and furnishings, as well as biological contaminants such as bacteria, allergens and mold may be found at many times higher levels indoors than outdoors, because they accumulate in buildings that have minimal ventilation. We've learned that by applying common sense and education we can make great improvements in our indoor air quality. In the absence of regulations, EPA has developed guidance to assist the homeowner, building manager and school administrator in reducing people's exposure to radon, secondhand smoke and chemical and biological air pollutants, many of which may trigger and exacerbate asthma episodes.

Asthma - The IAQ Connection

Unlike the vague term "sick building syndrome," asthma is a definable epidemic disease in which the indoor environment can play an important role. Asthma leads to more absences from school than any other chronic illness. Asthma is also an environmental justice issue, since some areas in EPA's Pacific Southwest Region contain some of the highest asthma rates in the nation. EPA has been providing grants to American Lung Association (ALA) affiliates in Tucson, the SF Bay Area, and ALAs in San Diego/Imperial, Orange County, Los Angeles and Santa Clara/San Benito Counties to support two important programs: (1) the ALA's own ***Open Airways for Schools***, a program which teaches children how to manage their asthma; and, (2) the EPA ***IAQ Tools for Schools Program***, a common sense program to help create a healthier school environment.

This past January 2002, EPA Region 9 hosted a two-day training event, ***"IAQ: Asthma and Allergens,"*** in Fullerton, California. With cosponsorship from organizations ranging from the California Apartment Association to the California Department of Health Services and the American Industrial Hygiene Association, the course benefitted 225 attendees, among them school personnel, apartment management companies, public health and housing officials and many health care professionals and asthma educators.

The Region 9 IET participates in or consults with a variety of entities, such as the California Asthma Strategic Planning Work Group, the Regional Asthma Management and Prevention Initiative, the San Francisco Asthma Task Force and the work group developing the California Department of Education school asthma standard. EPA's goal has been to encourage integration of environmental controls into asthma management and prevention. We've been gratified to see these organizations increasingly include consideration of the indoor environment in asthma programs and policies.

How can you help improve the air in your child's school?

- Visit the EPA Web site (www.epa.gov/iaq) and learn about indoor air quality in schools. It's not rocket science!
- Get the Tools for Schools Kit and the Tools for Schools Road Map.
- Talk to your school's principal or teacher and PTA. Ask to discuss the Tools for Schools Program at a staff meeting.
- Volunteer to be an Indoor Air Coordinator or to share the role with a teacher or another parent.
- Follow the steps in the Tools for Schools Road Map and you're on your way to a healthier, more productive school!

MOLD - Region 9 IET Led the Way

Highly publicized concerns about health problems related to mold growth in buildings, in combination with massive costs for clean-up and lawsuits, have made mold the hot button issue in indoor air quality. EPA's early recognition of the importance of molds to respiratory health issues, including asthma, prompted us to take the lead in preparing Region 9 stakeholders to address this complex issue.

In addition to offering numerous training sessions on how to deal with mold, we work closely with government and private organizations to provide the latest technical information on the rapidly evolving mold/buildings/health science, as well as program tools to prevent and address these problems.

Unattended leaks will grow mold.

We work closely with the California Department of Health Services and in the past year we've provided consultation and testimony for California's proposed legislation on mold, as well as helping the California Research Bureau with its report on toxic molds. We're currently discussing ways to help the Clark County (Nevada) Health Department develop its mold response capacity, just as we previously did with (California's) L.A. County. Region 9 played a big role in encouraging EPA to fast-track the national guidance document, "Mold Remediation in Schools and Commercial Buildings." This document received 153,000 "hits" in its first two months on our national Web page **(www.epa.gov/iaq)**.

Region 9 Has the Tools to Improve Indoor Air Quality (IAQ) in Schools

Poor indoor air quality, asthma and mold combine to challenge our schools. Schools are unique in their potential for exposing teachers, staff and children to indoor air quality problems. To address the unique school environment, EPA worked with school organizations to create the ***IAQ Tools for Schools Program***, a simple to use, common sense guide for preventing and responding to indoor air quality problems.


Educators learn mold detection

Mold fears shut Clovis school site

Buchanan High will close for three days while tests for the health threat are conducted.

By Felicia Cossart Matlosz
The Fresno Bee

Indoor air quality in schools is a two-sided coin. On one side we see that long-term underfunding has resulted in leaky roofs that cause mold growth, poorly operating ventilation systems that do not deliver adequate amounts of fresh air and windows that have long since been rendered inoperative. On the other side of the coin we see that school occupants contribute to IAQ problems as well. School staff need to know enough about the way their ventilation system works so that they do not block ducts and improperly operate controls. School occupants need to know about the sources of indoor air contaminants they bring into the school, from personal care products to cleaners, art and science supplies, etc. The ***Tools for Schools Program*** provides that basic education and shows school and district staffs how to build a team and a program to take charge of their own indoor air quality.

Lack of basic knowledge interferes with proper ventilation.

We urge all agencies to take the same approach as the school district. Open communication, early detection and partnership with individuals who use the buildings affected are the ingredients for effective managmenet of the problem of mold.

Actually, they are effective ingredients for dealing with most problems.

– *Monday, Dec. 10, 2001 excerpt from Visalia Times-Delta after Visalia School District adopted Tools for Schools.*

EPA Steps Up to the Plate!

EPA Region 9's Indoor Environments Team (IET) provides grants to cooperating partners, such as the American Lung Association, to assist schools in implementing the IAQ Tools for Schools Program. Additionally, the IET works directly with schools. Over the last three years, the IET has worked extensively with the San Francisco Unified School District (SFUSD) and two school districts in southern California when news reports of "toxic" portable classrooms resulted in a panic among parents and staff. The IET provided extensive training on the ***Tools for Schools Program*** and how to work cooperatively with the school community. The results of the combination of the ***Tools for Schools Program*** and our ***Community Involvement Program*** were the subject of an article ***"IAQ A Breath of Fresh Air,"*** which can be found in the winter 2000/2001 issue of the California Association of School Business Officials' (CASBO) Journal of School Business Management at **www.casbo.org/assets/Journal Air quality feature.PDF**.

IAQ Results

EPA and its cooperating partners in the Pacific Southwest Region have trained close to 2,000 school personnel on the ***Tools for Schools Program***, ***Mold Remediation***, ***Asthma & Allergens***, and ***Cleaning for a Healthy Environment***. In one school we've worked with, the nurse has reported a dramatic drop in the use of asthma inhalers.

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RADON

Reducing exposure to indoor radon gas has been a priority for EPA since 1986. Radon is a radioactive gas that occurs naturally in the soil from the decay of uranium. It is the second leading cause of lung cancer after smoking, causing 14,000 deaths each year. EPA recommends that all homes be tested, and if high levels exist, steps be taken to reduce radon. High radon levels have been found in Region 9, especially on Guam, where there are levels of over 100 picocuries per liter (pCi/L). EPA's action level for radon is 4 pCi/L.

The Indoor Radon Abatement Act gives EPA the authority to provide grants to states and tribes to develop a non-regulatory program, conduct radon surveys of homes and schools, educate the public on the health risks of radon, train contractors to mitigate homes and also work with the building code organizations to adopt EPA's radon-resistant new building techniques.

Currently our grantees include the Arizona Radiation Regulatory Agency; Nevada State Health Division, Radiological Health Section; the California Department of Health, Environmental Management Branch; and, the Guam Environmental Protection Agency. Tribal grantees include the Navajo Nation, Hopi Tribe Inter Tribal Council of Arizona, and Ely-Shoshone and Yerington Tribes, both in Nevada.

Working with tribes can be challenging because of cultural and language differences. Through the years EPA has developed outreach material for the public that was not necessarily appropriate for tribes. To help with this situation, the Inter Tribal Council of Arizona has developed a radon brochure for tribal communities that has been recognized across the nation.

The priorities of the program include increasing the public's awareness of radon, getting homes tested, testing public schools and building homes with radon-resistant features. The Territory of Guam passed a law that directed Guam EPA to test all its schools. The state of Arizona is currently testing all of its public schools, and Nevada has completed that process.

Because building a house with a radon-resistant system is much more cost-effective than having to mitigate an existing home ($300 vs. $2,000), EPA developed model building codes a few years ago, and suggests that all new homes built in high radon areas incorporate these features. The Navajo Nation has successfully worked with the Navajo Tribal Housing Authority to promote radon-resistant building techniques. Thirty-five homes on the reservation were built with radon reduction systems last year, with plans for more to be built this year. Guam EPA is working with its Department of Public Works to adopt a radon-resistant building code.

Testing for radon is inexpensive and homes with high levels can be fixed. But testing is the only way to ascertain if a home has elevated levels.

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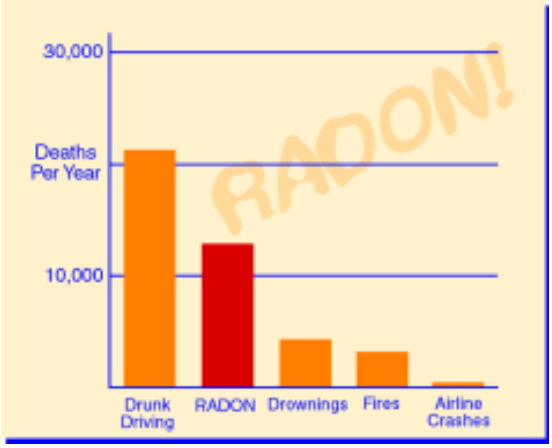

Go Out for Your Kids: "Take the Smoke-Free Home Pledge"

Every day 12 million children are exposed to secondhand smoke in their homes. This leads to serious health consequences, ranging from ear infections and pneumonia to asthma. Because children are more vulnerable -- they absorb greater concentrations of smoke than adults from the same exposure -- we must use greater caution to protect them from these health threats.

To protect children from secondhand smoke, EPA has launched a national campaign that encourages millions of parents to pledge to keep their home smoke-free. The Pledge is a collaborative effort with such groups as the American Academy of Allergy, Asthma and Immunology, and the American Academy of Pediatrics. For more information, contact (800) 513-1157.

"SUN WISE"

The Stratospheric Ozone Protection Program is the EPA program that regulates the production and use of ozone-depleting substances when used as refrigerants. When released into the atmosphere, ozone-depleting substances such as CFCs and HCFCs cause a thinning in the stratospheric ozone layer, which protects life on earth from harmful solar radiation. The regulations apply to restrictions and specific practices that relate to the production, importation, sale and use of these substances. In addition to these requirements, there is an aspect of the program that addresses the adverse health effects of ozone-depletion, such as skin cancer. This is a voluntary health education program called "Sun Wise."

"Sun Wise" was developed several years ago to educate and inform the community about ozone depletion and its adverse effects on the environment and human health. It includes an overview of what ozone depletion is, what causes it, and what we can do about it. But primarily, it focuses on how to prevent or minimize adverse health effects. It has been proven that ozone depletion contributes to a rise in skin cancer and cataracts, and damages marine and plant life in our environment. It is also known that safe habits learned in early childhood can make all the difference.

Here at EPA's Pacific Southwest Regional Office, we have conducted many outreach efforts to distribute a wealth of information on these topics. These activities take various forms, such as joint efforts with government/local agencies and private/community organizations. All the time and energy invested and supplies used by these entities are voluntary or donated. These items may include such things as free booths at fairs, mass mailings, and handouts such as sun screen. Everyone who volunteers to work on these ventures believes that this message is important and shares a commitment to get the word out.

Some of the worthwhile efforts undertaken within these past few years by the regional office include:

- *Physicians/Dermatologist Associations* - this is an effort where thousands of fact sheets have been distributed through doctors' offices to their waiting room patients.
- *Department of Health Mailings* - through children's programs implemented by the California Department of Health, materials have been provided for mass mailings to targeted communities.
- *A Day at the Park* - posters and materials have been provided at an amusement park during special event days for young athletes. Participants were kids who spend much of their summer days at outdoor sporting events such as swim teams and baseball teams.
- *Tucson Unified School District* - Materials were provided to train 100 elementary and middle school science teachers on "Sun Wise."
- *Reid Park Zoo* - EPA staffed a booth at an event in Tucson where approximately 2,000 kids attended and participated in activities learning about ultraviolet radiation (UV) sensitivity, including a demonstration of a UV-sensitve nail polish.
- "*Sun Wise" School Program* - an ongoing effort to solicit the interest of various elementary schools to sign up for the activities and materials designed for use by teachers. This includes activity handbooks, pencils, posters and a hand-held UV monitor.
- *UV Index Display* - EPA promoted the display of the daily UV Index readings at ball park games and in various media weather reports during the summer months.
- "*Sun Wise" Day* - EPA staff made classroom visits at various school events to hand out printed materials and sun screen.

Such activities continue and must rely on the time and dedication of people and organizations willing to be involved despite other commitments and limited funds. However, the EPA Region 9 Stratospheric Ozone Protection Program Team believes in a comprehensive approach to address the issue of ozone depletion. This includes not only a regulatory focus but also an informative and useful voluntary approach. The goal is to protect the ozone layer for a healthier and safer day in the outdoor sun.

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PUBLIC INVOLVEMENT WORKSHOP

Risk Communication...a Unique and Essential Experience for Government Officials

What do you do...when angry citizens are screaming at you about a controversial permit they think you will grant? Or when people demand that a nearby factory be closed because of a mysterious odor? Many agencies face these types of problems on a regular basis.

A host of state and local government agencies across the country found answers by attending EPA's 3-day Public Involvement and Risk Communication Workshop. Recently, the EPA Administrator requested a session for herself and her senior Administrators.

People have attended these workshops because they discovered that their usual scientific and regulatory approaches do not work well when confronted with controversial environmental problems that raise public concerns and media attention. The workshop gave them eye-opening methods to work more effectively with the public and other stakeholders. Participants discuss why and how to involve the public in decision making. They learn from real video examples how to decide on a better course of action and put it into practice by role playing.

Arnold Den and Alvin Chun prepare for a Public Involvement Workshop

The instructors are two experts in EPA's Pacific Southwest Regional Office: Captain Alvin Chun, U.S. Public Health Service, senior policy advisor, and Arnold Den, senior science advisor. With nearly 30 years each of experience at EPA working with many agencies, industries, and communities, both have a wealth of technical, management and communication experiences to share. Last year they were invited to conduct

workshops for the Swiss Government and U.S. Department of Agriculture Officials working on Mad Cow Disease, by the Australian Government and industry leaders working on environmental problems affecting nearby communities, and by doctors working on disease outbreaks for the People's Republic of China's Health Department in Hong Kong.

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BEYOND COMPLIANCE

Going Beyond Compliance Makes Dollars and $ense

As a business person, would you like to save money while improving your productivity and bottom line? How is this possible, you ask? By going above and beyond regulatory compliance through the use of Pollution Prevention (P2) techniques and Environmental Management Systems (EMS), coupled with innovative strategies.

In January 2002, EPA Administrator Christie Whitman was in Phoenix, Arizona to recognize the city of Scottsdale and Intel Corp., two of EPA's partners in voluntary programs aimed at using new technologies and innovation to achieve environmental results that go beyond regulatory compliance. "I can say with confidence that the city of Scottsdale is one of EPA's greatest partners," Administrator Whitman said. "One of EPA's newest and most comprehensive programs is the National Environmental Performance Track. The city of Scottsdale, which joined as a charter member more than a year ago, was the first local government accepted into this program, which now has 250 members. Like all of the partners in Performance Track, the city of Scottsdale is setting the pace toward a cleaner future for our children and grandchildren. They deserve our praise and recognition as an example to the rest of the country and I'm happy to give it to them."

Performance Track is intended for top performing facilities of all types, sizes and complexity - public or private, manufacturing or service-oriented. All must have proven records of regulatory compliance, an operational EMS and a demonstrated commitment to continued improvement and outreach to the community and the public. Companies and communities that voluntarily go beyond regulatory compliance benefit the environment, people and communities are the core of Performance Track.

Another charter member of Performance Track in Region 9 is Waste Management Inc., whose facilities located in Fremont, Livermore, Palm Desert and Simi Valley, California were recognized in 2001 for environmental management programs that exceeded legal requirements. President and Chief Executive Officer A. Maurice Myers of Waste Management, Inc. said, "We recognize that going beyond compliance is good for business and good for the communities we serve."

Some of the benefits of Performance Track membership include national recognition, and flexibility in record keeping, reporting and other regulatory requirements.

Administrator Whitman also recognized Intel Corp., a partner in EPA's voluntary Project XL for "eXcellence and Leadership," a national initiative that allows state and local governments, businesses and federal facilities to work with EPA to develop innovative strategies to test better or more cost-effective ways to achieve environmental and public health protection. Benefits of participation include regulatory, program, policy and procedural flexibilities, as well as national recognition.

"Intel Corporation's XL project is an excellent example of what we can accomplish through partnerships among people and organizations with a passion for protecting the environment and serving their community," said Whitman. "The project XL program is one of over 40 voluntary partnership programs EPA has developed to work with companies, state and local environmental regulators and their communities to develop new and innovative ways to protect the environment." Of Intel's facility in Chandler, Arizona, Whitman said "the site is a model for the rest of the country on how to achieve our environmental and economic goals at the same time."

For Information About Going Beyond Compliance:

INTERNET:
www.epa.gov/ (EPA's home page)

www.epa.gov/region09 (Regional information - look for your Regional Web site, with info on compliance assistance and pollution prevention)

www.epa.gov/p2 (EPA's national pollution prevention information Web page)

www.epa.gov/ems (Information on Environmental Management Systems (EMSs))

www.epa.gov/partners (Voluntary programs to help improve environmental performance)

www.epa.gov/performancetrack (National Environmental Performance Track program, for companies wanting to go above and beyond regulatory compliance)

www.epa.gov/projectxl (Project XL: eXcellence in Leadership)

PHONE:
EPA Region 9 contacts for Compliance Assistance and Pollution Prevention Information:

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Pollution Prevention Coordinators/ Waste Management Division

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CLIMATE CHANGE PROGRAM

The earth's climate is predicted to change. Human activities are altering the chemical composition of the atmosphere through the buildup of greenhouse gases such as carbon dioxide. These gases enhance the heat-trapping capability of the earth's atmosphere. Scientists generally believe that combustion of fossil fuels is one of the primary reasons for this increased concentration of carbon dioxide. Various national EPA programs exist to encourage the reduction of carbon dioxide emissions through the use of energy efficient products or renewable energy resources. The EPA Pacific Southwest Region's Climate Change Team is involved in several activities in coordination with these national programs. The following articles provide some general information about the national programs, related regional activities and contacts for further information.

ENERGY STAR PROGRAM

The Energy Star Program was introduced nationally by EPA in 1992 as a voluntary labeling program designed to identify and promote energy-efficient products such as computers and monitors. It offers businesses and consumers energy efficient solutions that save energy while protecting the environment. In 1996, EPA partnered with the US Department of Energy (DOE) to promote the ENERGY STAR label, with each agency taking responsibility for particular product categories. The ENERGY STAR label is now on major appliances, office equipment, lighting, consumer electronics, new homes, residential heating and cooling equipment and commercial and industrial buildings. EPA is the lead on home construction products such as insulation. DOE is the lead on some large home appliances such as dishwashers.

ENERGY STAR offers several energy-saving services specific to businesses. The program can help establish an energy performance target for new building design and provide a benchmarking tool for buildings allowing businesses to compare their energy use with that of similar organizations. ENERGY STAR can help businesses purchase products with the ENERGY STAR label and earn the ENERGY STAR label for a building.

Businesses may partner with the Energy Star Program. Businesses can label products that they manufacture to meet the ENERGY STAR specifications, and promote their product in the market place while demonstrating environmental stewardship. Stores can sell ENERGY STAR products and meet consumer demand for environmentally

friendly choices. Developers or contractors may build ENERGY STAR qualified homes, which save homeowners at least 30% off their yearly energy bill. For general information on the program or information on ENERGY STAR products, contact the ENERGY STAR hotline at 888-STAR-YES or go to the Web site at www.energystar.gov.

Regional Energy Star Activities

ENERGY STAR is the cornerstone of the Regional Climate Change Program. Sandra Boston is the primary contact from EPA's Climate Change Team for regional activities. She coordinates with DOE in various outreach activities such as energy fairs and participates in events held by businesses to promote their ENERGY STAR label products. She recently participated in Panasonic's ENERGY STAR Sweepstakes Award Ceremony at the Best Buy Store, Arden Fair Mall in Sacramento, California.

Bud Reichert, Grand Prize Sweepstakes winner, Randy Vanderpool (left) of Best Buy, Steve Rand (center, rear) of Panasonic, and Sandra Boston.

Sandra coordinates with Michael Stenburg, another member of the EPA Climate Change Team, and with the Small Business Administration (SBA) in San Francisco to promote energy efficiency among the small business community. Both participate in SBA training for small business owners to discuss energy savings strategies using Energy Star Program resources and information. There are approximately 50 training sessions per year in the greater Bay Area with outreach to over 8,000 individuals.

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Tribal Renewable Energy Resources and Pollution Prevention

In the year 2000, DOE prepared a report examining electricity use and renewable energy potential for tribal lands. The report, "Energy Consumption and Renewable Energy Development Potential on Indian Lands," showed many Indian households on reservations to be without electricity. The Indian lands with the greatest need for electrification are in Arizona. Almost 37% of all households on the Navajo Nation do not have access to electricity. As part of the effort to remedy this situation, the Intertribal Council of Arizona (ITCA), a private, non-profit corporation established to promote Indian self-reliance, is now working in partnership with EPA's Pacific Southwest Region, DOE and other federal agencies on a project to provide technical assistance to tribes in pursuing renewable energy resources.

The project will look at renewables, such as solar, wind and biomass for electricity generation. The DOE considers these renewables well-suited for remote, sparsely-populated tribal lands. Renewables also produce fewer greenhouse gases than fossil fuels. The first phase of the project will include educating tribal officials and residents of tribal lands in Arizona, California and other parts of the Southwest on the benefits renewables may provide to the tribes, including reliance in part on tribally-generated and -controlled energy, new job opportunities and pollution prevention.

The second phase will include identification of Indian lands in Arizona that have potential for renewable energy development and assisting tribes in the planning and implementation of renewable energy demonstration projects.

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Clean Air Voluntary Programs

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